

BORDER ENVIRONMENT COOPERATION COMMISSION (BECC)



THE BORDER ENVIRONMENT COOPERATION COMMISSION (BECC) IS AN INDEPENDENT, BINATIONAL ORGANIZATION CREATED TO SUPPORT THE DEVELOPMENT OF ENVIRONMENTAL INFRASTRUCTURE PROJECTS IN THE 100 KM REGION ON EITHER SIDE OF THE U.S.-MEXICO BORDER.



BORDER ENVIRONMENT COOPERATION COMMISSION

Mr. Javier Cabrera
General Manager

Mr. Pete Silva
Deputy General Manager

Mr. Edgardo Tovilla
Project Manager
CALIFORNIA-BAJA CALIFORNIA REGION

Dr. René Franco
Project Development Director

BORDER ENVIRONMENT COOPERATION COMMISSION

U.S. Mailing Address:
P.O. Box 221648,
El Paso, Texas 79913

PHYSICAL ADDRESS:
Blvd. Tomas Fernandez,
No. 8069
Fracc. Los Parques
Cd. Juarez, Chihuahua, Mexico
C.P. 32470

Tel: (011-52-16) 25-91-60
Fax: (011-52-16) 25-61-80
E-mail: (enter employee's name)
@cocef.org

Home Page:
<http://www.cocef.com>

OVERVIEW

BACKGROUND

The Border Environment Cooperation Commission (BECC) is an independent, binational organization created to support the development of environmental infrastructure projects in the 100 km region on either side of the U.S.-Mexico border. The Governments of the United States and Mexico created the BECC, and its sister organization, the North American Development Bank (NADBank), pursuant to an Agreement between the two Governments, in November of 1993.

The two organizations provide a new, bilateral approach for the development and financing of environmental infrastructure projects (water supply, wastewater treatment, and municipal solid waste). The BECC identifies, assists, evaluates, and certifies projects for financing consideration from the NADBank, or other funding sources. The BECC and NADBank work hand-in-hand to develop and finance projects in the border region.

When the NADBank is fully capitalized, it will have the lending capacity of \$3 billion dollars, with contributions made equally by the United States and Mexico, to leverage the financing needed by border communities. NADBank has additional resources to supplement its loan funding. The Border Environment Infrastructure Fund (BEIF), a \$170 million grant program initially funded by EPA, was created to provide grants for construction and transition funds to BECC-certified projects. Furthermore, the investment of private capital or equity capital and additional sources of funding is critical to complement NADBank's resources.

THE BORDER REGION AND ENVIRONMENTAL PRIORITIES

The border region is defined by the 1983 La Paz Agreement as the corridor 100 km (62 miles) on either side of the U.S.-Mexico boundary from the Gulf of Mexico to the Pacific Ocean.

More than 10 million people live in this region, in 6 Mexican states and 4 U.S. states. Rapid population growth, spurred on in part by increased industrialization, has created mounting environmental problems. These problems do not recognize international boundaries and include BECC's top priorities: water pollution, lack of wastewater treatment, and municipal solid waste management. The BECC's priorities presently do not encompass air pollution issues.

Given the nature of binational pollution problems, resolutions must be achieved through bilateral cooperation, addressing problems simultaneously on both sides of the border. The BECC and NADBank will help border communities address their environmental pollution problems for a sustainable economic and environmental future that will improve the quality of life for all border residents.

HIGHLIGHTS AND ACCOMPLISHMENTS

PROJECTS CERTIFIED BY THE BOARD OF DIRECTORS

The BECC Board of Directors has certified sixteen environmental infrastructure projects to date, with a total investment cost of \$230 million dollars, to benefit more than 3.6 million border residents. Projects are certified by the Board of Directors, with input from the BECC Advisory Council, during interactive public meetings held in U.S.-Mexican border cities. (See Attachment A for a list of Certified Projects.) The sixteen projects are among 100 projects currently in the project pipeline.

Eleven of the sixteen certified projects have sought or are seeking NADBank loans and/or grants through the BEIF. To date, the Bank has approved four projects for financing. The other five of sixteen projects are utilizing BECC certification to seek funding from other sources.

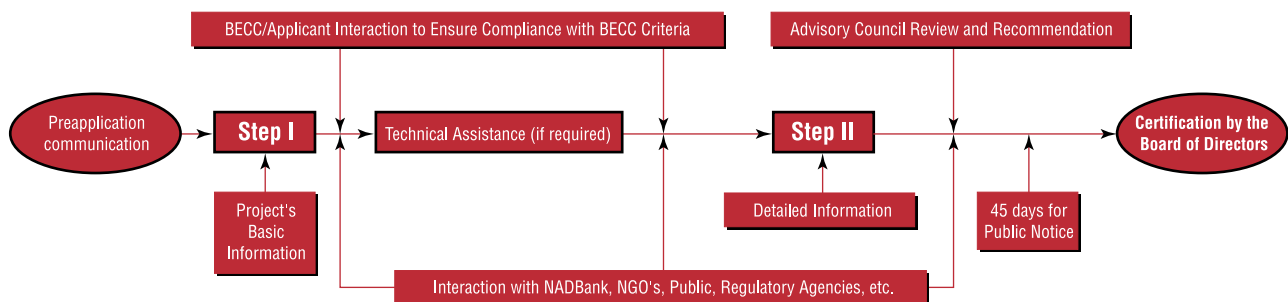
Currently, of the projects certified, seven have begun construction (Brawley, CA; Mercedes, TX; Nogales, Son.; FINSA, Tamps.; EPISO, TX; Douglas, AZ; El Paso, TX). According to the project sponsors, three more projects are scheduled to begin construction shortly (Agua Prieta and Puerto Peñasco, Son.; and Alton, TX).

PROJECT DEVELOPMENT AND TECHNICAL ASSISTANCE

The BECC received a \$10 million grant from the EPA to enhance its Technical Assistance Program and provide direct grants to communities for project development. The purpose of the program is to help communities strengthen their project proposals through comprehensive planning and design, environmental assessment, financial analysis and institutional capacity building and strengthening.

The program is enhanced by coordination with local, state and federal governments and the local communities to promote integrated regional master plans and project development. Strengthening the institutional capacity of local communities is critical to ensure that local communities can operate and maintain the facilities themselves over the long-term.

CERTIFICATION PROCESS FLOW CHART



To date, the BECC has provided more than \$800,000 to communities for assistance with project development. In fact, almost every certified project has received technical assistance from the BECC. The specialized BECC staff also helps communities identify environmental infrastructure needs, prepare project proposals and strengthen institutional capacity for project management.

The NADBank has established an Institutional Development Cooperation Program (IDP) that will devote at least \$2 million per year in grant resources to assist public utilities with institutional capacity building and strengthening. The NADBank has devoted IDP resources to Brawley, CA; Douglas, AZ; Mercedes, TX; Naco, Agua Prieta, Puerto Peñasco and Nogales, Sonora; and Cd. Acuña, Coahuila, and expects to be working with 32 additional communities by the end of the year.

BECC STANDARDS FOR PROJECT CERTIFICATION

The BECC has developed Project Certification Criteria in order to evaluate and certify environmental infrastructure projects. To be certified by the BECC, a project must comply with each of the BECC criterion related to: 1) environment and human health; 2) technical feasibility 3) financial feasibility and project management; 4) community participation; and 5) sustainable development. The criteria document also incorporates guidelines to achieve high sustainability recognition for those projects that incorporate principles of sustainable development, above and beyond the specific criteria.

BECC BOARD OF DIRECTORS

The BECC has a binational Board of Directors with 10 members—five from each country—with decision-making procedures structured to ensure that the views of affected states, local communities, and members of the public will be fully taken into account. The Commission is required to consult with an Advisory Council of 18 members—nine from each country. The BECC is managed on a day-to-day basis by a General Manager and a Deputy General Manager and other officers and staff required to perform the duties. The first BECC General Manager position is currently filled by a Mexican national, Mr. Javier Cabrera. The BECC Deputy General Manager, is a US national, Mr. Pete Silva. These positions/countries will reverse at the end of each three-year term unless the Board makes an exception. Each country has five members on the Board of Directors.

The U.S. Board Members are:

Mr. Ygnacio Garza, BECC Board Chairman, Brownsville, TX
 Ms. Carol Browner, Administrator, U.S. Environmental Protection Agency, Washington, D.C.
 Mr. Thomas L. Soto, President, P.S. Enterprises, Santa Monica, CA
 Ms. Lynda Taylor, Director, Southwest Research and Information Center, Albuquerque, NM
 Mr. John Bernal, U.S. Commissioner, International Boundary and Water Commission, El Paso, TX.

The Mexican Board Members are:

Mr. Guadalupe Osuna Millan, Mayor, Tijuana, Baja California
 Mr. Rogelio Ramos Oranday, Secretary of Social Development, Saltillo, Coahuila
 Mr. Arturo Herrera Solis, Mexican Commissioner, International Boundary and Water Commission, Cd. Juarez, Chihuahua
 Ms. Julia Carabias, Secretary of the Environment, Natural Resources and Fisheries, Mexico City

PUBLIC MEETINGS OF THE BOARD OF DIRECTORS

Public meetings of the Board of Directors are dynamic events, characterized by extensive participation from the public. Conducted in U.S. and Mexican border, the meetings serve as an opportunity for the 10-member Board to interact with border residents. During the meetings, time is made available to the public to provide direct comments to the Board on procedures and project certifications. Thus far, the BECC Board conducted twelve public meetings in the border cities of Cd. Juarez, Tijuana, Brownsville, El Paso, Nogales, Sonora, San Diego, Laredo and Mexicali.

PUBLIC OUTREACH

As a new border institution, effective public outreach is critical to teach border communities about the BECC and NADBank, their technical assistance opportunities, and to assist with project development. The BECC has conducted numerous outreach meetings and participated in meetings and conferences border-wide.

Additionally, the BECC publishes a monthly newsletter, called BECCNEWS, to provide updates on BECC projects and activities. The BECC communicates regularly over the internet by means of an electronic server called BECCNET, which has over 360 subscribers. And, the BECC maintains a website located at: <http://cocef.interjuarez.com>.

BECC meets individually with project sponsors regularly throughout the border region, to guide them in developing project proposals to the BECC.

A LOOK AHEAD

BECC will continue to work on the compendium of projects that continue to be submitted. Specific focus will be given to provide project development assistance for border communities, especially small communities, to help them address their pressing environmental infrastructure needs.

STATUS OF CERTIFIED PROJECTS

To date, the BECC has certified 16 projects with a total estimated cost of \$230 million, to benefit more than 3.6 million people. (Eight projects are located in the United States; eight in Mexico.) The status/advancement of each project is described below.

WATER TREATMENT PLANT IN BRAWLEY, CA, \$25 MILLION.

The project will replace the city's existing water treatment plant, with a modern facility that will supply cleaner water to enable the city to meet both federal and state standards for water quality. The project has a capacity of 660 liters per second with the capability to expand. The project will benefit 24,000 residents. (NADBank financing approved.)

ADVANCEMENT: Certified in September 1995, financing for the project was approved by the Bank in December 1996 after much local public debate over the rate issue. The City of Brawley is bidding out the project in five phases to keep project costs down. Currently, the city is completing the first three phases which includes mass excavation (98% complete), reservoir (70% complete), and distribution lines (86% complete). By September 100% of the work should be awarded to finish the final two phases of the project including a pump station and new processing facility. Design for the processing facility is complete. As a complement to the Bank's financing, a water and sewer line survey in Brawley will be performed with NADBank IDP assistance.

WATER SUPPLY AND SEWAGE COLLECTION PROJECT, MERCEDES, TEXAS, \$4.1 MILLION.

The City of Mercedes, with a population of about 14,000, currently has water treatment, water distribution, and wastewater collection facilities that are operating close to design capacity, which restricts the city in its ability to provide service to new residential and commercial users. The project consists of: 1) expansion of the water treatment facility from 3 to 4.5 mgd; 2) extension of the water supply lines; 3) improvements to the sewer system; 4) drainage improvements; 5) construction of an elevated 500,000 gallon storage tank (1,893 m³); and 6) relocation of an existing irrigation canal. The project is enhanced by work financed by the Texas Water Development Board (TWDB) to extend water and sewer services to the colonias. (NADBank financing approved.)

ADVANCEMENT: Certified in November 1996, Mercedes celebrated its groundbreaking ceremony to begin construction on May 23, 1997. NADBank has served as an investment bank and direct lender for the project to complement the financial package for the project from the TWDB, Economic Development Administration, and the Rio Grande Valley Empowerment Zone Corporation. The project will serve as a model for projects requiring interim financing from the NADBank with permanent financing from the TWDB. The NADBank will loan \$1.87 million to the project for interim finance. The BECC provided a technical assistance grant to the city to complete its project proposal. The NADBank will provide additional assistance to the city through the IDP for an inventory and technical evaluation of water lines and system assets.

WATER SUPPLY AND DISTRIBUTION PROJECT (PHASE I), NOGALES, SONORA, \$39 MILLION.

This integral project finds a solution to the continuous problems with water supply and distribution in Nogales, Sonora. The phase I project includes the rehabilitation of the existing water lines, which currently lose 40% of the water supply through the antiquated distribution system, construction of 33 kms of distribution lines, improvements in the efficiency of pumping, and construction of elevated water tanks. The project will benefit 200,000 residents.

ADVANCEMENT: Certified in January 1996, the construction on the Los Alisos aqueduct for the project has begun and is 18% complete, with a \$8.7 million grant from the National Water Commission, appropriated by President Zedillo. In 1996 the NADBank approved issuing a letter to the project sponsor indicating the Bank's intent to consider partial financing once the privatization process had taken place. The system operator is currently in the process of privatizing the facility and signing a contract with a private firm to complete the rest of the project and the financing process. The BECC provided a technical assistance grant to the city to complete the project's financial analysis for certification. The NADBank, through its IDP, has agreed to perform a line survey and to provide management information system hardware, software and training. The goal is to work in a coordinated effort under IBWC's Minute 294 to consolidate the water and wastewater projects of Nogales, Sonora and Nogales, Arizona.

UPGRADE OF WATER AND WASTEWATER TREATMENT FACILITIES, DOUGLAS, ARIZONA, \$2 MILLION.

The project will improve the water distribution and wastewater collection system, including water main improvements, new wastewater interceptor lines, extensions of water lines to the Fairview Colonia and extensions of wastewater lines to Sunnyside Colonia, both adjacent to the city. The project will benefit 1,250 residents.

ADVANCEMENT: Certified in January 1996, the project called for grant funds only. The City of Douglas has completed the construction of the sewer collection system in the Sunnyside colonia and has begun the water main improvements for the Fairview area. The NADBank has structured an agreement with the city to perform a water and wastewater rate study that will be used to determine an affordable rate structure for a proposed expansion project that will be seeking BECC certification in the future.

WASTEWATER TREATMENT PLANT FOR THE FINSA INDUSTRIAL PARK, MATAMOROS, TAMAULIPAS, \$1 MILLION.

The project will provide wastewater treatment for municipal wastewater generated by the more than 22,000 employees within the industrial park. The project includes the development of a Master Plan, to provide wastewater treatment services for several colonias adjacent to the industrial park. (NADBank financing approved.)

ADVANCEMENT: Certified in January 1996, the project was completed in January 1997. Through the public participation process, this private project sponsor made a \$50,000 commitment of in-kind services to the colonias surrounding the Industrial Park. They agreed to invest their resources in a water supply/wastewater treatment study for the area. This commitment is being realized in coordination with Matamoros' water operator.

**ON-SITE SELF-HELP WASTEWATER TREATMENT SYSTEM
FOR THE COLONIAS OF EL PASO COUNTY, TEXAS, \$213,000.**

Sponsored by the El Paso Interreligious Sponsoring Organization (EPISO), the on-site self-help project will provide zero-interest loans to help 180 colonia families properly install septic tanks and treat household sewage. The innovative project is a cooperative effort among EPISO, the University of Texas at El Paso (UTEP), and the colonia families themselves to build septic systems.

ADVANCEMENT: Certified in July 1996, with existing resources from the Levi Strauss Foundation and a small grant from General Electric, EPISO, UTEP and the colonias families have installed 23 septic systems, or an average of 2-3 per month since certification. The BECC and NADBank are actively helping EPISO pursue other funding sources to complete the project.

WASTEWATER REUSE PROJECT, EL PASO, TX, \$11.7 MILLION.

Treated wastewater will be reused for irrigation and industrial uses in Northwest El Paso. The project will also lead to reduced dependence on underground water reserves shared by both countries. The water reuse system capacity is 66 liters per second and will benefit 90,000 residents.

ADVANCEMENT: Certified in November 1995, the El Paso Water Utilities has received funding for its project from three sources: local improvement funds, State Revolving Funds, and Bureau of Reclamation funds. BECC certification helped the water utility secure the \$3.5 million grant from the Bureau of Reclamation. Design for the project has been completed. Presently, the water utility is advertising the construction for the first phase of the project, which will include a reservoir, pump station and conveyance lines. Construction began on August 5th.

WATER SUPPLY AND WASTEWATER TREATMENT PROJECT, NACO, SONORA, \$1.03 MILLION.

The project will provide a comprehensive solution to existing water supply, wastewater collection and treatment problems and eliminate wastewater flowing into the State of Arizona. The project will enable the city of Naco to address the low efficiency of the equipment for the pumping and distribution of water, provide micro and macro metering, optimize the utilization of the sewer system, and provide institutional capacity to conserve water and operate and maintain the system. (NADBank financing approved.)

ADVANCEMENT: Certified in April 1996 with a preliminary cost estimate of \$654,000. The project proposal was completed with technical assistance from the BECC. Since certification, the cost estimate for the project has risen to \$1.03 million. Based on original estimates, Mexico's National Water Commission has committed \$315,635 for the project, for which the state government of Sonora has prepared bidding packages. Also, the NADBank approved financing of \$180,000 and the EPA agreed to provide \$300,000 in grants. Currently, the NADBank is in the process of obtaining additional financial assistance for this project. As a complement to financing, assistance from the NADBank's IDP was authorized to update the Naco water utility's user register and provide management information system hardware, software and training.

SANITARY LANDFILL PROJECT, PUERTO PEÑASCO, SONORA, \$1.7 MILLION.

The proposed sanitary landfill project for Puerto Peñasco will replace an existing open-air dump that experiences frequent fires due to an uncontrolled release of methane gas. Presently, the city collects

50 tons/day of domestic and commercial solid waste, from five collection routes with weekly service. The project will benefit the 27,200 population of Puerto Peñasco.

ADVANCEMENT: Certified in November 1996, the state government is in the process of defining a first phase of the project with a cost of \$850,000. The state government has committed \$425,000 for construction of the first phase of the project. The City of Puerto Peñasco is expected to apply to the NADBank for a loan to cover the remaining \$425,000. Once components of the first phase are defined, bids for construction will be sent out and construction on the project may begin in forty days. The BECC provided a technical assistance grant to the city for a rate model, institutional strengthening and project proposal. The NADBank's IDP will assist in performing a study of solid waste regulations, institutional organization and solid waste collection and transportation.

SANITARY LANDFILL PROJECT, AGUA PRIETA, SONORA, \$1.9 MILLION.

The proposed sanitary landfill project for Agua Prieta, Sonora, will provide municipal solid waste collection and disposal services for the Agua Prieta community of 56,000 people. It is estimated that presently about 80 tons/day of solid waste is generated from domestic, commercial, and other sources. The maquiladora industry generates about 6 tons/day. The current open-air dump has a remaining useful lifetime of only 18-24 months.

ADVANCEMENT: Certified in November 1996, construction for the project will be carried out in phases that are still being defined. SEDESOL has already approved \$262,500 for a first phase costing \$525,000. The City of Agua Prieta has applied to the NADBank for a loan of the same amount. Bids for application of the SEDESOL financing are presently being prepared. The BECC provided a technical assistance grant to the city for a rate model, institutional strengthening and project proposal. The NADBank has authorized IDP assistance to the city to perform a study of solid waste regulations and institutional organization.

WASTEWATER TREATMENT PROJECT, SOMERTON, ARIZONA, \$1.5 MILLION.

The City of Somerton has a population of approximately 6,000 and utilizes a waste stabilization pond system with the capacity to treat up to 400,000 gpd. The system is currently operating at capacity and experiences problems meeting the NPDES water quality requirements established by EPA. The City will install a new treatment system, with several advantages, including a minimal production of biological solids, which substantially reduces the cost of handling and disposing of sludge.

ADVANCEMENT: Certified in November 1996, the city has completed the bidding for construction and is in the process of selecting the most qualified company. The BECC provided a technical assistance grant to the city for a study of project alternatives.

The project will treat wastewater that is currently being discharged to the Ensenada Bay without adequate treatment. The project will enable this port city to promote clean beaches, thus strengthening its tourism industry. It has a capacity of 500 liters per second and will benefit 250,000 residents.

ADVANCEMENT: Certified in September 1995, CESPE, the system operator for the Ensenada project, has decided to modify the project, which will require the project to be re-evaluated by the BECC for certification in the future, in order to qualify for NADBank financing. Mexico's National Water Commission is waiting for CESPE to determine the direction of the project in order to complete corresponding studies.

**PARALLEL CONVEYANCE SYSTEM AND REHABILITATION OF THE
SAN ANTONIO DE LOS BUENOS PLANT, TIJUANA, BAJA CALIFORNIA, \$18 MILLION.**

The project includes the construction of a pump station and 16 km collector that will allow the city to better manage its sewage flows. The project will allow needed repairs to the existing conveyance system and will help avoid sewage runoff into the Tijuana River. The project includes the rehabilitation and expansion of the wastewater treatment plant at San Antonio de los Buenos. The project will benefit more than 1 million Tijuana residents.

ADVANCEMENT: Certified on June 18, 1997, the project will pursue a \$16 million grant from the EPA and a \$2 million loan from the NADBank. Certification of the project was made possible by a technical assistance grant from the BECC to enhance community participation and complete the project proposal.

WASTEWATER TREATMENT SYSTEM, ALTON, TEXAS, \$14.8 MILLION.

The project includes the construction of a wastewater collection system for the city and its surrounding colonias. Collected wastewater will be treated at McAllen's wastewater treatment plant. The project will benefit the 3,000 residents.

ADVANCEMENT: Certified on June 18, 1997, the project will be financed by resources from the Texas Water Development Board and U.S. Department of Agriculture, and will pursue additional funding from the NADBank. The City of Alton awarded the contract for construction in June 1997, to begin construction in July 1997.

SOUTH BAY RECLAMATION PLANT, SAN DIEGO, CALIFORNIA, \$99.6 MILLION.

The project will allow treated wastewater in the southern part of the Metropolitan Wastewater System to be reused in San Diego, Imperial Beach, Chula Vista, National City, and areas outside of San Diego county. The plant has an initial treatment capacity of 7 million gallons per day (mgd), with the capability to expand. The project will decrease the burden on the already overloaded treatment facility at Point Loma, and lessen the city's use of primary water from its source for certain activities.

ADVANCEMENT: Certified on June 18, 1997, the project will pursue a grant from the EPA to cover a portion of the project costs.

ECOPARQUE, TIJUANA, BAJA CALIFORNIA, \$170,000.

This project consists of the expansion of a pilot project set up to treat wastewater to secondary standards for reuse as irrigation to green areas. The project will benefit 21,000 residents of the Otay area.

ADVANCEMENT: Certified on June 18, 1997, the project will seek grant funding from a variety of sources.

